

REMARKS

Claims 1-40 are currently pending in the subject application, and are presently under consideration. Claims 1-8, 12-16, 21-28, and 32-36 are rejected. Claims 9-11, 17-20, 29-31, and 37-40 have been indicated as allowable. Claims 1, 3, 4, 6-21, 29, 34, and 38 have been amended. New claims 41-46 have been added. Favorable reconsideration of the application is requested in view of the amendments and comments herein.

I. Objection to the Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "200" and "201" in FIG. 1 have both been used to designate "User Terminal." FIG. 1 has been amended to remove reference character "200." A replacement FIG. 1 has been included in this response reflecting this amendment. Additionally, the Abstract and paragraphs [0051], [0052], and [0053] of the specification have been amended to remove reference character "200." Withdrawal of the objection is respectfully requested.

II. Objection to the Abstract

The Abstract is objected to because of informalities. The Abstract has been amended to correct the informalities. Withdrawal of the objection is respectfully requested.

III. Objection to the Specification

The specification is objected to because of informalities. Paragraphs [0002], [0003], [0005], [0006], [0016], [0021], [0024], [0026], [0029], [0032], [0046], [0048], [0049], [0051]-[0054], [0070], and [0071] have been amended to correct the informalities. Withdrawal of the objection is respectfully requested.

IV. Rejection of Claim(s) 1-8, 12-16, 21-28, and 32-36 Under 35 U.S.C. §103(a)

Claims 1-8, 12-16, 21-28, and 32-36 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,570,355 to Dail, et al. ("Dail") in view of U.S. Patent No.

6,016,311 to Gilbert, et al. ("Gilbert"). Withdrawal of this rejection is respectfully requested for at least the following reasons.

Amended claims 1 and 21 the release of uplink bandwidth previously allocated to one or more of the user terminals based on at least one of terminal data loading and bandwidth release parameters. Dail teaches the allocation of TDM bandwidth in an ATM or STM communications system. In Dail, allocated bandwidth is released upon a finished transmission, for the cell to become reallocated upon a new transmission: "[w]hen the burst is transmitted completely, the periodic allocation of the time slot is terminated for this ATM/VBR call. When the same ATM/VBR source produces another burst of data at a later time, the source would then seek allocation of a new reservation ATM time slot." (col. 14, ll. 48-53). The Office Action dated July 15, 2004 (page 4) cites this section in arguing that releasing uplink bandwidth previously allocated to one or more of the user terminals based on at least one of terminal data loading and bandwidth release parameters is taught by Dail. Representative for Applicant respectfully disagrees. As previously described, Dail teaches that bandwidth is released upon a finished transmission. However, Dail is silent as to the release of bandwidth based on terminal data loading and bandwidth release parameters. Therefore, Dail does not teach or suggest that bandwidth is released based on at least one of terminal data loading and bandwidth release parameters, as recited in claims 1 and 21.

The addition of Gilbert does not cure the deficiencies of Dail to teach claims 1 and 21. The Office Action dated July 15, 2004 cites Gilbert for the teaching of a satellite communications system that assigns initial bandwidth allocations of the uplink bandwidth for one or more user terminals (page 5). Representative for Applicant respectfully disagrees.

Gilbert teaches an adaptive time division duplexing system for duplexing transmissions on a communication link in wireless communication systems. Gilbert discloses that "[e]ach cell within the wireless communication system provides wireless connectivity between the cell's base station and a plurality of customer premises equipment (CPE) located at fixed customer sites throughout the coverage area of the cell....Information is allowed to flow in both directions between the base stations and the plurality of CPEs....The wireless communication system of

FIG. 4 provides true 'bandwidth-on-demand' to the plurality of CPE." (col. 9, line 60 - col. 10, line 22). Accordingly, the allocation of bandwidth taught by Gilbert is the allocation of time slots in a TDM system between uplinks and downlinks in communications between fixed user equipment and a base station. Gilbert teaches that a cell site may contain direct broadcast satellite receiver equipment, but does not teach bandwidth allocation in an uplink to the satellite. Additionally, Gilbert does not teach or suggest that uplink bandwidth allocation is initially assigned to one or more user terminals in a satellite communications system including an uplink, as recited in claims 1 and 21. Accordingly, Dail and Gilbert, individually or in combination, neither teach nor suggest the recitations of claims 1 and 21. Withdrawal of the rejection of claim 1, as well as claims 2-8 and 12-16 which depend therefrom, and claim 21, as well as claims 22-28 and 32-36 which depend therefrom, is respectfully requested.

Claims 2 and 22 depend from independent claims 1 and 21, respectively. Accordingly, for the reasons stated above with regard to claims 1 and 21, claims 2 and 22 should also be patentable over the cited art.

In addition, claims 2 and 22 each recite that said assigning initial bandwidth allocations comprises initial bandwidth allocations transmitted to one or more of the user terminals. The Office Action dated July 15, 2004 asserts that this element is taught by Dail (pages 6 and 10). However, on pages 4-5 and 8-9 of the Office Action dated July 15, 2004, it is specifically stated that Dail does not teach or suggest that initial bandwidth allocations of uplink bandwidth are assigned for one or more of the user terminals, as recited in claims 1 and 21. Accordingly, since the Office Action states that Dail does not teach initial bandwidth allocations of uplink bandwidth, as recited in claims 1 and 21, Dail does not teach or suggest that said assigning initial bandwidth allocations comprises initial bandwidth allocations transmitted to one or more of the user terminals, as recited in claims 2 and 22. Additionally, Dail does not teach or suggest transmitting assigned bandwidth to one or more of the user terminals, as recited in claims 2 and 22. Accordingly, withdrawal of the rejection of claims 2 and 22, as well as claims 3, 4, 6, 7, 12, and 13, and 23, 24, 26, 27, 32, and 33, which respectively depend from claims 2 and 22, is respectfully requested.

For the reasons described above, claim(s) 1-8, 12-16, 21-28, and 32-36 should be patentable over the cited art. Accordingly, withdrawal of this rejection is respectfully requested.

V. Rejection of Claim(s) 1-8, 12-16, 21-28, and 32-36 Under 35 U.S.C. §103(a)

Claims 1-8, 12-16, 21-28, and 32-36 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Dail in view of U.S. Patent No. 4,625,308 to Kim, et al. ("Kim"). Withdrawal of this rejection is respectfully requested for at least the following reasons.

Amended claims 1 and 21 recite the release of uplink bandwidth previously allocated to one or more of the user terminals based on at least one of terminal data loading and bandwidth release parameters. As discussed above, Dail teaches the allocation of TDM bandwidth in an ATM or STM communications system. Dail, however, is silent as to the release of bandwidth based on terminal data loading and bandwidth release parameters. Therefore, Dail does not teach or suggest that bandwidth is released based on at least one of terminal data loading and bandwidth release parameters, as recited in claims 1 and 21.

The addition of Kim does not cure the deficiencies of Dail to teach claims 1 and 21. The Office Action dated July 15, 2004 cites Kim for the teaching of a satellite communications system that assigns initial bandwidth allocations of the uplink bandwidth for one or more user terminals (page 9). Representative for Applicant respectfully disagrees.

Kim teaches an all digital TDMA dynamic channel allocated satellite communications system providing a satellite communications network. Kim further teaches that "[u]pon network initialization, each node in the system of the present invention is allocated a pre-determined amount of bandwidth," (col. 14, ll. 3-5) and that "nodes are separated geographically and service user devices in their respective geographical areas." (col. 2, ll. 43-45). Thus, Kim teaches that network nodes that service user terminals, and not the user terminals themselves, are initially allocated uplink bandwidth. Accordingly, Kim does not teach that uplink bandwidth allocation is initially assigned to one or more user terminals in a satellite communications system including an uplink, as recited in claims 1 and 21. Accordingly, Dail and Kim, individually or in combination, neither teach nor suggest the recitations of claims 1 and 21. Withdrawal of the

rejection of claim 1, as well as claims 2-8 and 12-16 which depend therefrom, and claim 21, as well as claims 22-28 and 32-36 which depend therefrom, is respectfully requested.

As discussed above, for the reasons previously stated with regard to claims 1 and 21, claims 2 and 22 should also be patentable over the cited art. Additionally, as also demonstrated above, Dail does not teach or suggest transmitting assigned bandwidth to one or more of the user terminals, as recited in claims 2 and 22. Accordingly, withdrawal of the rejection of claims 2 and 22, as well as claims 3, 4, 6, 7, 12, and 13, and 23, 24, 26, 27, 32, and 33, which respectively depend from claims 2 and 22, is respectfully requested.

For the reasons described above, claim(s) 1-8, 12-16, 21-28, and 32-36 should be patentable over the cited art. Accordingly, withdrawal of this rejection is respectfully requested.

VI. Allowable Subject Matter

Claims 9-11, 17-20, 29-31, and 37-40 are object to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. However, because claims 1 and 21, as discussed above, are patentable over the cited art, so also should be claims 9-11, 17-20, 29-31, and 37-40. Accordingly, withdrawal of the objection to claims 9-11, 17-20, 29-31, and 37-40 is respectfully requested.

VII. New Claims

New claims 41-46 have been added. New claims 41 and 44 recite that the uplink bandwidth comprises a combination of frequency division multiplexing (FDM) and time division multiplexing (TDM) data cells that are individually allocated to the one or more user terminals. New claims 42 and 45 recite that each of the FDM/TDM data cells is allocated separately and contains one of a portion of IP data transfer by a satellite and a bandwidth allocation request. New claims 43 and 46 recite that the uplink bandwidth further comprises one or more frequency divisions corresponding to an allocated frequency spectrum and a frequency capability of the one or more user terminals. New claims 41-43 depend from independent claim 1, and new claims

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44-46 depend from independent claim 21, and should therefore be patentable over the cited art for the reasons described above with regard to claims 1 and 21. Additionally, new claims 41-46 all recite frequency division of the uplink bandwidth, which is neither taught nor suggested by the cited art. Accordingly, the allowance of new claims 41-46 is respectfully requested.

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Docket No. NG(MS)7226

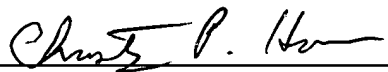
CONCLUSION

In view of the foregoing remarks, Applicant respectfully submits that the present application is in condition for allowance. Applicant respectfully requests reconsideration of this application and that the application be passed to issue.

Please charge any deficiency or credit any overpayment in the fees for this amendment to our Deposit Account No. 20-0090.

Respectfully submitted,

Date 10/12/09



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